

New Genera and Species of *Psilopinæ*.

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The genus *Psilopus* has heretofore occupied a place apart in the family Dolichopodidae. Notwithstanding the immense number of species, comprising some ninety in America alone (if we may trust the descriptions), no acceptable plan of dividing the genus has yet been proposed. Bigot's attempt (Ann. Soc. Ent. Fr., Oct., 1890, p. 268) is the latest. His high estimate of the value of the antennal modifications has led him to overlook other characters, and select, in two instances, a nodule or disk on the arista of the male antenna as the basis of a new genus. This is too slight a character for the purpose. The apical or dorsal insertion of the arista, which he uses to separate two groups of genera, would, if well-marked, be important; but when it is necessary to explain at some length just how far up from the apex the arista may be and yet be "apical or subapical," the value of the distinction sinks into insignificance.

Loew (Mon. N. A. Dipt. II, 231) suggested that the color of the regular cilia seemed to offer the best ground for division of the genus. In the line of his proposition, I have found that these cilia, when black, are associated with four large bristles on the scutellum, and a third longitudinal vein of the wing which curves backward at the tip in the normal manner. When they are pale, the scutellum has only two large and usually two small bristles, and the third vein near its tip is distinctly curved forward, parallel or nearly so with the branch of the fourth vein. Thus we find ample ground in three distinct characters, applicable to both sexes, for the division of the genus. In an examination of about thirty species, these characters apply perfectly to all but one: in this, a South American species, the curved vein is associated with four large scutellar bristles and the regular cilia are half pale and half black. This species I would include among those with black cilia.

Adding to these two genera two more which are new to science, described in this paper, we have the section *Psilopinæ* of the family Dolichopodidae thus characterized:

Fourth longitudinal vein with a widely divergent fork on the front side; or if not, then the head wider than the thorax, face wide, and the front deeply excavated.

GENERA OF PSILOPINAE.

1. Fourth longitudinal vein not forked, *Aptorthus*, n. gen.
Fourth vein forked. 2.
2. Tegular cilia black, third vein gently curved back at tip, scutellum with four large bristles, *Psilopus* Meigen.
Tegular cilia pale, third vein distinctly curved forward at the tip, scutellum with only two large, and usually also two small, bristles. 3.
3. Face wide, front deeply excavated, *Gnamptopsilopus*, n. gen.
4. Face narrow, front scarcely excavated, *Leptorthethrum*, n. gen.

The name *Psilopus* is preoccupied in the Mollusca, as Osten Sacken and others have mentioned. A new name should not be proposed for the dipterous genus without a careful examination of several of the older European works, which are inaccessible to me. It is probable that, as Bigot suggests, *Psilopodius* Rondani is the legitimate successor of the old name.

GNAMPTOPSILOPUS n. gen.

(*gnamptos*, bent).

Includes all that part of the old genus *Psilopus* in which the species have pale tegular cilia. Other characters are as above mentioned. *Psilopus scintillans* Lw., *bicolor* Lw., *tener* Lw., and *filipes* Lw., are typical species.

APTORTHUS n. gen.

(*a*, without: *p'orthus*, branch).

Structure of the head as in *Psilopus*, front very deeply excavated. Posterior crossvein shorter and less oblique than in *Psilopus*, its anterior end nearer the middle of the wing; fourth vein with a rounded but rather short curve forward, at a distance beyond the crossvein equal to the length of the latter; beyond this curve gradually retiring to its former course, so that the first posterior cell has a long, slender, gently narrowed tip; the end of the fourth vein is before the apex.

Aptorthus albiciliatus n. sp.

Male. Face broad, with thin yellow pollen; front shining green, the two ocellar bristles black, a bunch of bristles behind these and another on each side next the orbit yellowish; antennae small, black, the arista dorsal, rather short, the hairs of the second joint of the antenna yellow; palpi and proboscis pale; cilia of the inferior orbit white, rather bushy. Thorax shining blue-green, with black bristles; pleurae slightly white dusted; tegula white, its tip black, with long whitish-yellow cilia; halteres yellow, the peduncle brownish; scutellum with four bristles, the inner pair somewhat larger than the outer. Abdomen shining blue-green, with rather thick and coarse hair, which is black at the base and somewhat rusty, or in some lights yellowish,

before the tip; on each side of the first segment a bunch of long yellow hairs; hypopygium black, closely folded up to the venter, the small apical organs yellow. Coxae green; the fore and middle ones with long white hairs on the front side; trochanters yellow; femora green, rather broadly yellow at the tips, with white hairs, longer below, especially on the middle and hind femora; fore and middle tibiae yellow, the hind ones brownish-yellow; all the tarsi gradually infuscated toward the tip; the fore and middle tarsi are considerably, the hind ones scarcely, longer than their tibiae. Wings hyaline, the venation as described.

Female. Pollen of face white, lateral bunches of hair on the front brownish-black, the central bunch very short, whitish; hairs of the second antennal joint rather short, brown; abdomen with shorter hairs, lacking the white ones on the first segment; femora and hind tibiae wholly yellow, the former with short hair.

Length, 4 mm.; of wing, 3.5 mm.

Two males and two females, Westville, N. J., July 5 and 20 (C. W. Johnson).

***Aptorthus borealis* n. sp.**

Female. Differs from the female of the preceding in having yellow fore coxae, brownish at base; on each side of the front near the eye are only a few small black bristles.

One female, Ramsey Co., Minn. (Lugger).

***Aptorthus nigripes* n. sp.**

Female. Face white-dusted; palpi and proboscis brown; antennae black, second joint with black or dark brown hairs; front shining green, the two bristles of the ocellar tubercle black, behind the tubercle a cluster of small, white ones; on each side next the eye are a few white bristles and two black ones farther forward. Cilia of inferior orbit white. Thoracic dorsum shining blue-green; pleurae blackish-green, with white dust; tegulae white with a narrow black edge and long white cilia; halteres yellow, abdomen blue-green, shining, with black hairs, which are mixed with a few paler ones at the sides near the base. Coxae blackish-green, with conspicuous white hairs. Femora of the same color, with black hairs except on the lower edge, where the hairs are pale and rather short; knees yellow; fore tibiae brownish-yellow, the middle and hind ones, with their tarsi, brown. Fore tarsi brownish-yellow at base, darker toward the tip. Wings hyaline, venation as above described for the genus.

Length, 4 mm.; of wing, 3.5 mm.

One female, California, Aug. 5 (Coquillett).

Aphorthus townsendii n. sp.

Female. Face thinly dusted with white: front bright green, ocellar bristles yellow, the cluster just behind these minute, white; bristles of the sides of the front yellow; antennae black, hairs of second joint brown: cilia of inferior orbit white, thorax bright green with a thin coat of white dust, especially about the edges, the bristles long and strong, brownish yellow in color, those of the central dorsal region more blackish. Pleurae green, with whitish dust; halteres and tegulae as in *nigripes*; scutellum with a large and a small pair of yellow bristles. Abdomen golden green, with short yellow hairs all over its dorsal surface. Fore coxae yellow with coarse yellowish-white hairs; middle and hind coxae black, with yellow tips and white hairs; femora, tibiae and tarsi yellow, the last toward the tip blackened, especially the hind ones. The hairs of the legs are few, short and pale. Wings hyaline, venation as above.

One female, Aztec, Arizona, July 21 (Townsend).

Length, 4 mm.; of wing, 3.5 mm.

LEPTORHETHUM n. gen.

(*leptos*, narrow; *rhetos*, face).

Head wider than thorax; face long, narrow; antennae as in *Psilopus*, arista dorsal; front scarcely at all excavated, the lateral bristles small, acrostichal bristles in two rows; scutellum with a large inner and a small outer pair of bristles. Abdomen of male somewhat clavate, the hypopygium sessile, but little visible. Wings narrowed at base, sixth vein absent; third longitudinal vein curved forward at the tip; fourth vein forked as in *Psilopus*.

Leptorhethum angustatum n. sp.

Male. Antennae, proboscis, coxae and legs yellow; cilia of tegulae yellow; eyes almost contiguous on the middle of the face. thorax bright green above; abdomen green, venter and basal segments largely yellow.

Length, 2 mm.; of wing, 2.2 mm.

One male, St. Vincent, West Indies (H. H. Smith).

A fuller description of this species will appear in an extensive paper on the West Indian Diptera now in preparation.